Nanosize Inorganic Material Powders

UNIVERSITY OF UTAH

CENTER

The main focus of this Center is to synthesize nanosize oxide powders by a low-cost, commercially scalable process using inexpensive precursors. There are numerous applications for these powders, including fuel cells, catalysts, and sensors.

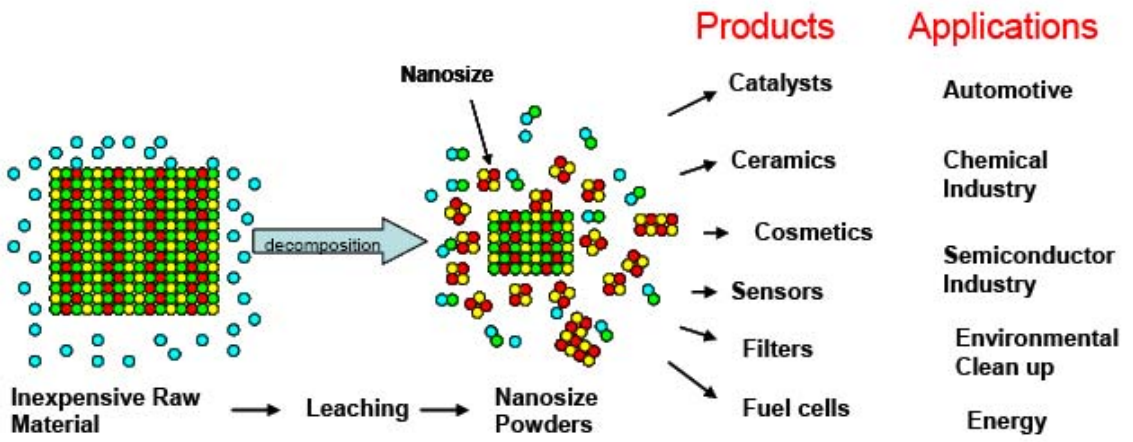
TECHNOLOGY

The Center's core technology is based on molecular decomposition to create nanosize powders, which creates a uniform size of various composition and is less expensive than conventional molecular addition techniques. This allows the technology to be used in the application of sensors, which competitors have not yet been able to accomplish.

THINK TANK

What if there was...

A way to make highly responsive sensors from inexpensive nanosize powders?



ACCOMPLISHMENTS

The Center has synthesized several new nanosize powders, including CSZ, YSZ, SnO_2, Fe_2O_3, Fe_3O_4, and In_2O_3. In addition, the Center has successfully fabricated sintered parts of selected nano materials, metallic and ceramic membranes, and nanoporous sensors.

This year, the Center's Director received the Governor's Medal of Science and Technology and a new spinout was created, Nano-Oxides, Inc.

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